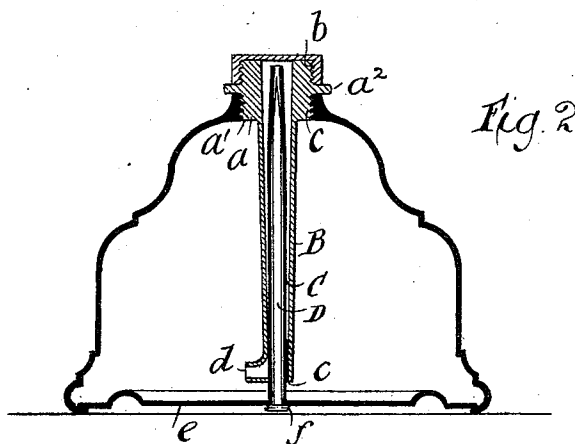
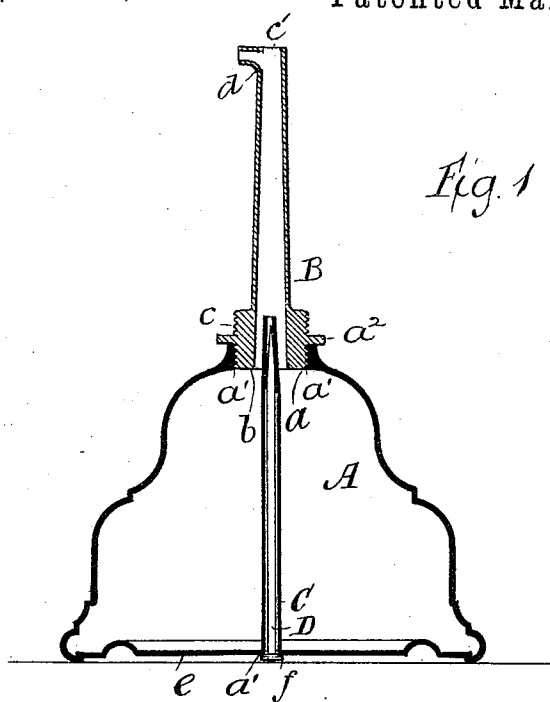


(No Model.)

W. C. WILSON.
OIL CAN.

No. 579,626.

Patented Mar. 30, 1897.



Witnesses

Clarence W. Hughes.
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WILLIAM C. WILSON, OF BROOKLYN, NEW YORK, ASSIGNOR TO FRANCIS RAYMOND, OF SAME PLACE.

OIL-CAN.

SPECIFICATION forming part of Letters Patent No. 579,626, dated March 30, 1897.

Application filed June 29, 1896. Serial No. 597,371. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. WILSON, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Oil-Cans, &c.; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a central longitudinal sectional view showing the parts in position for use, and Fig. 2 is a like view showing the parts in the relative positions occupied by them when the apparatus is not required for immediate operation.

This invention relates to that class of oilers or "oil-cans," so termed, which are employed by machinists and others for various purposes, as, for example, supplying liquid lubricants to the journals of shaftings and to bearings of one kind and another and for many and various purposes in the mechanic arts. Heretofore with such devices it has been difficult to control or regulate the outflow of lubricants, and the range of utility of any one kind of oiler has ordinarily been restricted within a narrow range, while for some purposes, as in the supply of oil-cups for bearings, it has been found necessary to add a force-pump to the oiler to enable the latter to secure the results for which it is intended. Further, apparatuses of this kind heretofore in use have ordinarily been provided with fixed projecting parts which are liable to be easily broken or otherwise injured and which even under favorable conditions, when not in actual use, occupy space to an inconvenient and undesirable extent. My invention is intended to obviate these and other defects, and to this end it comprises certain new and useful combinations of parts hereinafter described, and fully particularized in the claims.

A is the body or oil-receiver of the apparatus, which in the main may be of any desired size, shape, and material. The mouth *a* of this body is provided with a suitable screw-thread *a'*.

B is a nozzle made of tapering form and provided at its larger or inner end with two annular or circumferential screw-threaded

nuts *b* and *c*. In pitch and character the screw-thread of each of these nuts is such that it may on occasion be screwed into the screw-threaded mouth *a* of the body A. Between these nuts may be provided a nulled head *a''* to facilitate the turning of the nuts into or out of the mouth *a*, as the case may be. The outer or smaller end of the nozzle B is open, as shown at *c'*. Springing laterally from this same end of the nozzle is a tubular beak *d*, which serves as a second outlet from the nozzle.

Fixed within the body A is a tube C, which should be of tapering form, and the inner end *a'* of which opens externally through the bottom *e* of the body, while its inner end opens into the body A, as shown more clearly in Fig. 1. Thrust into this tube from the lower end *a'* is a thin stem D, which may have at its outer extremity a button *f* to facilitate its manipulation. This stem may be detachable from the tube and from the body, but its functions depend upon its coördination therewith. This stem, however, by reason of its detachability may be used as a convenient implement for clearing out the oil-canister, &c., and for other purposes. The proportions of this stem are such that when thrust inward to its limit it will practically close the passage through the tube. As the latter is somewhat tapered and narrowest at the top, a passage of greater or less capacity is afforded through the tube when the stem is partially withdrawn, the available size of the passage being thus capable of adjustment by the greater or less withdrawal of the stem from the tube.

When the apparatus is to be used, the parts are brought into the relative position shown in Fig. 1, with the nozzle B extended outward and fixed in place by screwing the nut *b* into the threaded mouth of the body A. To use the apparatus, it is inclined to permit the liquid contents of the body A to pass by gravity to and through the nozzle; but so long as access of external air through the tube C is prevented by the stem D such descent, by reason of external atmospheric pressure, is impossible. The stem D is therefore partially withdrawn to permit air to pass inward to the body, and in proportion to such access of air to replace liquid passed from the body

is the rapidity with which the liquid escapes through and from the nozzle. For example, when the passage of air inward through the tube C is very much throttled or restricted the liquid will pass from the nozzle only in drops, while with increase in the rapidity and volume of the air-supply through said tube the outflow of the liquid is increased and may be permitted to reach the proportions of a continuous stream, the quantity delivered and the rapidity of its delivery being wholly under control by the simple manipulation of the stem D. The exit of the liquid from the nozzle may be either through the opening *c'* at its extremity or through the lateral beak *d*, according to the position in which the apparatus is held or inclined. The beak *d* is of especial advantage in supplying lubricants to oil-cups of elevated shafting, as it enables the lubricant to be readily poured into the cups by the use of only one hand of the operator under conditions which heretofore have required the use of a force-pump to direct the lubricant from the oil-receptacle, the latter being an operation which requires the use of both hands by the operator. The conjunction of the beak with the opening also enables one and the same apparatus to be instantaneously turned from one condition of work to another, thereby economizing both time and labor.

When it is desired to close the body against escape of its contents and to bring the apparatus into compact form for carriage or laying aside, the nut *b* is unscrewed from the mouth *a* of the body and the nozzle, inverted, is thrust into the body and passed upon and around the tube, as shown in Fig. 2, whereupon the nut *c* is screwed into the mouth *a*, thereby holding the nozzle firmly in its last-mentioned position, with its end surrounding and tightly fitting the tapering surface of the tube C. A cap E, which has an internal screw-thread corresponding in pitch and character to that of the nut *b*, is screwed upon the latter and thus closes and covers the base of the inverted nozzle. The stem D being thrust inward to close the passage through the tube C, the body is hermetically sealed, and as the nozzle is inclosed within the body there is no projecting part liable to be broken by vicissitude or rough usage.

What I claim as my invention is—

1. The combination with a body, A, having

a screw-threaded mouth, and a tapering tubular stem open externally at its lower end of a detachable and reversible nozzle having the nuts, *b*, and, *c*, and proportioned to fit over and upon said stem to close the body at the mouth thereof and also at the lower portion of said stem, substantially as and for the purpose herein set forth.

2. The combination with a body, A, having a screw-threaded mouth, a detachable and reversible nozzle having nuts, *b*, and, *c*, and a tubular stem open externally at its lower end of a longitudinally-movable stem for regulating the admission of air through the tube and for closing the same when the nozzle is inverted and inclosed in the body, substantially as and for the purpose herein set forth.

3. The combination with a body, A, having a screw-threaded mouth, a tapering tube within the body but open externally at its lower end, a stem placed in said tube to control the capacity of the passage therethrough, and a detachable and reversible nozzle having nuts, *b*, and, *c*, of a screw-threaded cap constructed to be screwed upon the nut, *b*, when the nut, *c*, is screwed into the mouth of the body with the nozzle reversed and surrounding the tube, substantially as and for the purpose herein set forth.

4. The combination with a body, A, of a nozzle attached to the mouth thereof and having the opening, *c'*, at its end and a lateral tubular beak, *d*, adjacent thereto, a tapering tube placed within the body but externally open at its lower end, and a longitudinally-movable stem for controlling the capacity of the passage through the tube, all substantially as and for the purpose herein set forth.

5. The combination with a body having a screw-threaded mouth, a detachable and reversible nozzle having nuts, *b*, and, *c*, a laterally-projected beak, *d*, and opening, *c'*, at its end, of a tapering tube placed within the body but externally open at its inner end and a longitudinally-movable stem placed in said tube to control the capacity of the passage therethrough, substantially as and for the purpose herein set forth.

WILLIAM C. WILSON.

Witnesses:

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JNO. C. MCQUHAE.